

REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-6, 8-10 and 12 are presently pending in this application, Claims 7 and 11 having been canceled, Claims 1-6 and 8-10 having been amended, and Claim 12 having been newly added by the present amendment.

In the outstanding Office Action, Claim 7 was objected to for informalities; Claims 1-11 was rejected under 35 U.S.C. §112, second paragraph, for being indefinite; Claims 1-6 were rejected under 35 U.S.C. §102(b) as being anticipated by Allen (U.S. Patent 4,063,845); Claims 1 and 7 were rejected under 35 U.S.C. §102(b) as being anticipated by either Hallinger et al. (U.S. Patent 4,623,298), or Borufka et al. (U.S. Patent 5,154,581), or Jorgensen (U.S. Patent 4,878,811); Claims 1, 8-10 were rejected under 35 U.S.C. §102(b) as being anticipated by North (U.S. Patent 4,902,198); and Claims 1 and 11 were rejected under 35 U.S.C. §102(b) as being anticipated by either Steel et al. (U.S. Patent 4,317,646) or Riedmiller et al. (U.S. Patent 4,177,004).

Claim 1 has been amended and Claim 12 has been newly added in the claims. These amendment and addition in the claims are believed to find support in the specification, claims and drawings, for example, the specification, page 11, line 17, to page 12, line 5, as well as Figures 2 and 5. Hence, no new matter is believed to be added thereby.

Furthermore, with regard to the rejection under 35 U.S.C. §112, second paragraph, Claims 1-8 and 10 have been amended to clarify the subject matters recited therein. Thus, the pending claims as currently amended are believed to be in compliance with the requirements of the statute. If, however, the Examiner disagrees, the Examiner is invited to telephone the undersigned who will be happy to work in a joint effort to derive mutually satisfactory claim language.

Briefly recapitulating, amended Claim 1 of the present invention is directed to a wall of a gas turbine, and the wall includes a plurality of wall sections connected in the direction of a set of blades in the gas turbine and forming a wall surface having a substantially circular cross section, the wall sections being fixed to an outer end or an inner end of the set of blades in the gas turbine, or being positioned to interpose a predetermined space between the outer end of the set of blades and forming a passage wall for high temperature gas together with a blade surface of the respective blade, and a plurality of gas flow restricting devices positioned in gaps formed between the wall sections, respectively, and configured to restrict the high temperature gas from flowing in the gaps along axial and radial directions of the gas turbine. By providing such gas flow restricting devices, the side end surfaces of the walls, e.g., platforms, shrouds and ring walls in the gas turbine, are more effectively prevented from burning caused by the high temperature gas, thereby reducing the wear and tear, and prolonging life and maintenance intervals of the gas turbine parts such as platforms, shrouds and rings.¹

The outstanding Office Action asserts that Allen discloses the gas flow restricting devices as recited in Claim 1. Nevertheless, it is respectfully submitted that Allen does not teach "a plurality of gas flow restricting devices positioned in gaps formed between the wall sections, respectively, and configured to restrict the high temperature gas from flowing in the gaps along axial and radial directions of the gas turbine" as recited in amended Claim 1. On the other hand, Allen merely discloses the seal arrangement 34 for minimizing leakage through a gap between successive shrouds,² and according to Allen, the seal arrangement 34 simply provides the annular flat coil 35 fitted in the groove 38 of the upstream shroud 18 and the groove 39 of the downstream shroud 28, and bridging the gap 36 between these upstream

¹ Specification, page 11, line 17, to page 12, line 19.

² Allen, column 1, lines 5-8.

and downstream shrouds 18, 28. As such, not only the Allen seal arrangement 34 is completely different from the gas flow restricting devices recited in amended Claim 1, but also Allen does not disclose or suggest "a plurality of wall sections connected in the direction of a set of blades in the gas turbine and forming a wall surface having a substantially circular cross section, the wall sections being fixed to an outer end or an inner end of the set of blades in the gas turbine, or being positioned to interpose a predetermined space between the outer end of the set of blades and forming a passage wall for high temperature gas together with a blade surface of the respective blade" also recited in amended Claim 1. Therefore, the structure recited in amended Claim 1 is believed to be clearly distinguishable from Allen.

Likewise, Hallinger et al., Borufka et al., Jorgensen, North, Steel et al. and Riedmiller et al. all disclose turbine shrouds, but none of these cited references is believed to teach "a plurality of gas flow restricting devices positioned in gaps formed between the wall sections, respectively, and configured to restrict the high temperature gas from flowing in the gaps along axial and radial directions of the gas turbine" as recited in amended Claim 1. Thus, the structure recited in amended Claim 1 is also believed to be distinguishable from Hallinger et al., Borufka et al., Jorgensen and North, Steel et al. and Riedmiller et al.

Because none of Allen, Hallinger et al., Borufka et al., Jorgensen, North, Steel et al. and Riedmiller et al. discloses the gas flow restricting devices as recited in amended Claim 1, even the combined teachings of these cited references are not believed to render the structure recited in Claim 1 obvious.

Likewise, Claim 12 includes subject matter substantially similar to what is recited in Claim 1 to the extent discussed above. Thus, Claim 12 is also believed to be distinguishable from Allen, Hallinger et al., Borufka et al., Jorgensen, North, Steel et al. and Riedmiller et al.

For the foregoing reasons, Claims 1 and 12 are believed to be allowable.
Furthermore, since Claims 2-6, 8 and 10 ultimately depend from Claim 1, substantially the

same arguments set forth above also apply to these dependent claims. Hence, Claims 2-6, 8 and 10 are believed to be allowable as well.

In view of the amendments and discussions presented above, Applicants respectfully submit that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

A handwritten signature in black ink, appearing to read 'G. Maier', is written over a horizontal line.

Gregory J. Maier
Attorney of Record
Registration No. 25,599

Akihiro Yamazaki
Registration No. 46,155

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
GJM/AY:fm

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